

2.13

GENERIC PROVISIONS BIODIVERSITY







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Part 2 Generic Provisions

2.13 Biodiversity

Biodiversity refers to the variety of life: the different plants, animals and micro-organisms, the genes they contain and the ecosystems of which they form. Biodiversity is vital in supporting human life. It provides many benefits, including all our food, clean air and water and fertile soils.

2.13.1 Local government and biodiversity

Councils have a range of policy and management functions including:

- Land use planning and development controls that impact biodiversity;
- Maintenance and development of physical infrastructure;
- Waste management;
- Provision of local community education facilities and community awareness programs;
- Management of open space for recreation and conservation; and
- Pollution control.

These and other functions are highly relevant to the local and regional management of biodiversity, a relatively new responsibility for local government.

Over recent years, considerable policy development has occurred through revised planning schemes, local conservation strategies and the Local Agenda 21 initiative that flowed from the 1992 United Nations (UN) Conference on Environment and Development. More recently, a national policy for local government biodiversity management has been developed (ALGA 2000).

2.13.2 Local government provisions for biodiversity

The National Local Government Biodiversity Strategy (NLGBS) established a common policy direction for all local government across Australia, recognising the importance of biodiversity and the need for integrated local government approaches and actions. The NLGBS outlines the following objectives to address five key issues:

1. To develop a national awareness, training and education program.
2. To ensure adequate resourcing for all interested councils or regional organisations in order to have a greater role in biodiversity conservation, including the specific requirements of indigenous communities.
3. To encourage regional partnerships and planning, preferably along existing regional boundaries.
4. To encourage state governments to review, and possibly amend, legislation relating to the role of local government in managing biodiversity.
5. To establish a nationally coordinated information and monitoring system which is integrated with existing databases and to provide councils with basic information on biodiversity in their area.

Those objectives provide a basis for monitoring and evaluating local government needs and achievements in biodiversity conservation.

2.13.3 Protection of endangered/threatened species

An objective of the *Environmental Planning and Assessment Act 1979* (EP&A Act), is to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats.

Objectives

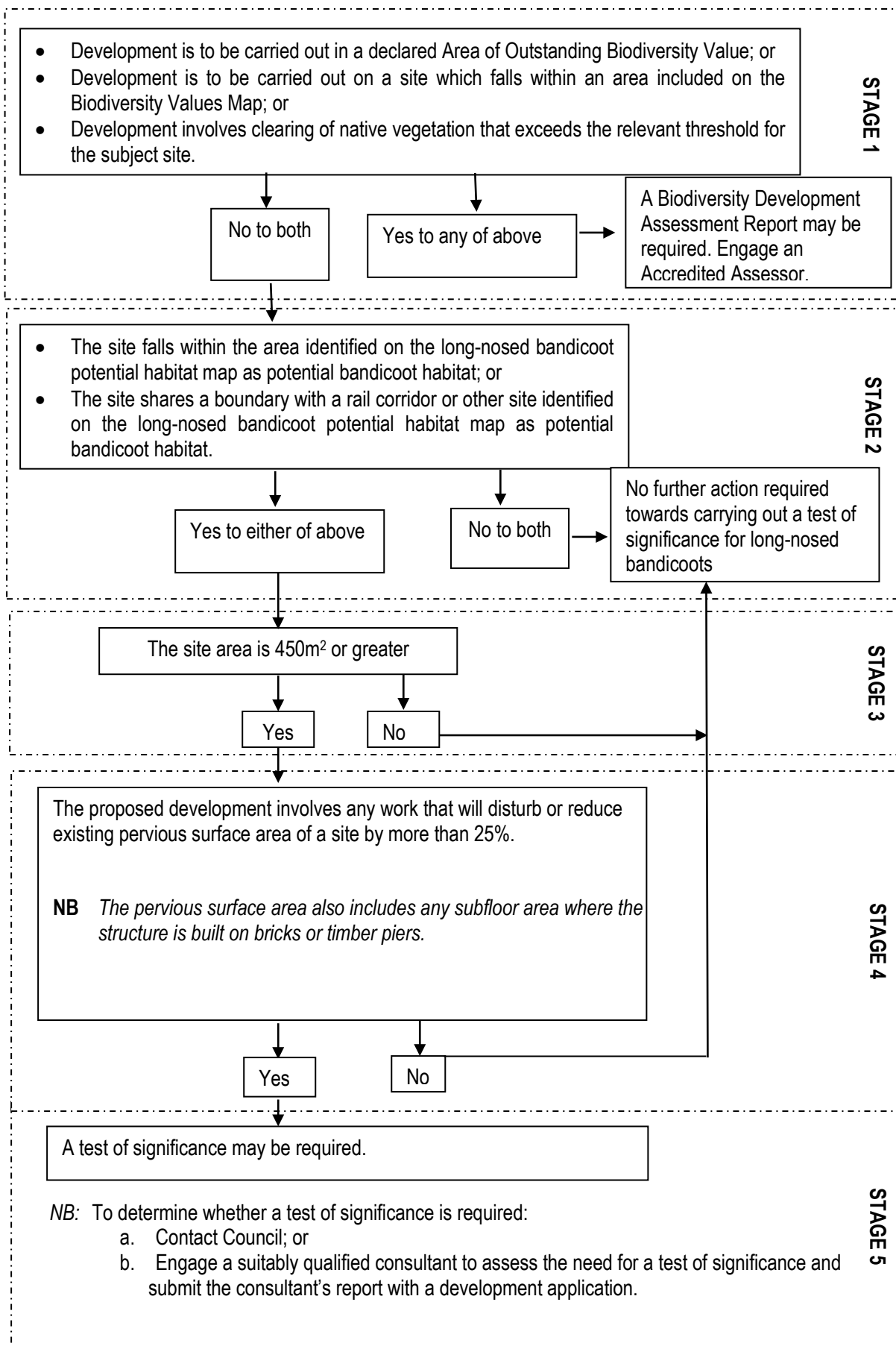
- O1** To protect and promote the recovery of threatened species, populations and endangered ecological communities.

Controls

- C1** Development on land identified on the Biodiversity Map as Bandicoot Protection Area, provided in Appendix 3, may be required to undertake an assessment of significance. Figure 1 outlines the decision making framework used to determine whether there may be a significant impact on the long-nosed bandicoot population and the need to undertake an assessment of significance.



Figure 1 - Criteria to determine the need for an assessment of significance for long-nosed bandicoots



2.13.4 Wildlife corridors

Wildlife corridors are vegetation features (preferably remnant bushland, but may include remnant trees, native plantings, weed thickets and gardens) that connect larger areas of remnant bushland and facilitate fauna movement. Fauna movement allows dispersal, interbreeding and re-colonisation to occur, improving long-term viability of the species. Fauna movement also facilitates pollen and seed dispersal, enhancing the viability of plant populations. Continuous corridors are preferable, but discontinuous corridors still contribute to fauna movement and can potentially be improved through habitat enhancement.

Objectives

- O2** To provide natural habitat for local wildlife and benefits to the community.
- O3** To retain and enhance native vegetation and the ecological functions of wildlife corridors.
- O4** To reconstruct habitat in non-vegetated areas of wildlife corridors that will sustain the ecological function of a wildlife corridor and that, as far as possible, represents the combination of plant species and vegetation structure of the original community.

Controls

- C2** Development on land identified on the Biodiversity Map as Wildlife Corridor, provided in Appendix 3, must incorporate native vegetation as part of any landscaping works.

NB *A detailed list of native vegetation is provided in Section 2.18 (Landscaping and Open Spaces) of this DCP.*

2.13.5 Development near parks, bushland reserves and other public open spaces

The impacts of development on natural areas and public spaces can be partly redressed through sympathetically designed development, the retention of remnant vegetation areas and by providing suitable habitat in parks and private gardens.

Objectives

- O5** To protect and preserve bushland adjoining parks, bushland reserves and other public open spaces.
- O6** To ensure development responds to its adjacent surroundings and helps preserve and enhance the natural qualities of the environment.
- O7** To encourage development that complements the landscape character and public use and enjoyment of the land adjacent to open spaces.

Controls

- C3** Buildings must be located to provide an outlook to public open space without appearing to privatise that space.
- C4** Development must provide a visual transition between open space, bushland reserves or other public spaces and buildings, including avoiding abutting public open space with back fences.
- C5** Development must protect views to and from public open spaces.



NB *The above controls can be best addressed through a detailed site and context analysis. See Section 2.3 (Site and Context Analysis) of this DCP.*

2.13.5.1 Advisory notes

Where suitable, development should ensure access to public open space is provided via roads or easements for access.

Development may retain outlook and views by:

1. Choosing materials that minimise building mass;
2. Articulating the building elevation, fence and wall materials, height, design and the selection of landscape; or
3. Selection of suitable vegetation to form an attractive transition to the open space.

The transition between development and open space may be enhanced by:

1. Incorporating a vegetation link to open space with the landscaping design;
2. Providing a similar landscaping design and plant species as the adjacent bushland;
3. Selecting fence materials that integrate with the open space characteristics;
4. Locating the building away from the open space areas;
5. Relating building heights to open space vegetation height;
6. Preserving significant fauna and flora habitats;
7. Providing a protective buffer between the development and bushland;
8. Not introducing non-native flora and fauna;
9. Minimising clearing; or
10. Providing on-site soil and water management that treats stormwater before it enters bushland.

Views to and from open space may be protected by:

1. Avoiding development that may interrupt the skyline;
2. Minimising clearings to avoid fragmentation of the landscaping especially adjacent to bushland reserves;
3. Limiting the height of development to below the tree canopy; or
4. Setting development back from the open space area.

2.13.6 Waterways and riparian lands

River health is influenced by the function and health of the stream banks or land adjoining the waterway, which is referred to as the 'riparian' zone, land or corridor.

Objectives

- O8** To protect, maintain and enhance the ecology and biodiversity of waterways and riparian land.
- O9** To encourage development to be located outside waterways and riparian land.
- O10** To avoid impacts that will result in an adverse change in watercourse or riparian land condition.
- O11** To minimise risk to life and property from stream bank erosion and flooding by incorporating appropriate controls and mitigation measures.
- O12** To maintain and improve access, amenity and scenic quality of waterways and riparian lands.

Controls

C6 Infrastructure such as roads, drainage, stormwater structures or services must be located outside land identified as a waterway and riparian land.

NB *Development within 40 metres of a waterway may require a "controlled activity approval" pursuant to the Water Management Act 2000. Development that requires a controlled activity approval under that Act constitutes integrated development pursuant to Sections 4.46 and 4.47 of the EP&A Act. Before granting development consent to an application for consent to carry out the development, the consent authority must obtain the general terms of any approval from the relevant approval body. Applicants need to refer to this legislation separately.*



Appendix 1 – Long-nosed Bandicoot factsheet

Long-nosed Bandicoot

Scientific Name:
Perameles nasuta

Conservation Status in NSW:
Endangered population

Photo: Paul Meek ©DECCW



A colony of Long-nosed Bandicoots (*Perameles nasuta*) has recently been rediscovered within the suburbs of Dulwich Hill, Lewisham and Petersham in Sydney's inner west. This population of Australian native, nocturnal marsupials has been declared as an Endangered Population under the *Biodiversity Conservation Act 2016*.

Description

Long-nosed Bandicoots have a longer nose than feral rats. They have a creamy white contrast to their brown coat over their forelimbs, hind limbs and underbelly. Adult Long-nosed Bandicoots are much larger than rats, attaining sizes similar to adult rabbits. Their ears are more elongate and pointy than rats' ears, too.

Size: Ranging from 310mm - 425mm in length, tail length varies from 120mm - 155mm and body weight may vary from 850grams - 1100grams.

Colour: Typically dark; greyish-brown above and creamy white below. The forefeet and upper surfaces of the hind feet are also creamy white. The muzzle is long and pointed and the ears are large and distinctly pointed.

Diggings: When foraging for food, bandicoots dig small conical holes with their forefeet which are just large enough for their long pointy snout. Those diggings can be indicators of the presence of bandicoots in an area, but they can be confused with diggings by rats, rabbits and pied currawongs, as well as other animals. Their depth is anywhere between a few centimetres and 15cm and approximately the circumference of a twenty cent coin.

Habitat and ecology

Diet: Consists primarily of beetles, larvae, cockroaches, ants and plant material including leaves, stems and tubers and fungi.

Threats: The Long-nosed Bandicoot population is threatened by habitat loss and fragmentation as a result of urban development, predation by domestic cats, dogs and



Conical bandicoot diggings

introduced foxes as well as deaths resulting from road accidents, depression and disease (toxoplasmosis).

Finding a bandicoot

If a bandicoot is found while undertaking construction, contact any of the following organisations immediately:

WIRES	1300 094 737
Sydney Metropolitan Wildlife Services (‘Sydney Wildlife’)	9413 4300
Livingstone Road Animal Health Centre, Petersham	9568 3077
Coordinator Urban Ecology Volunteers and Projects Inner West Council	9392 5000

Protecting the bandicoot population

- Establish an area in the garden as a native fauna sanctuary, to provide shelter and food;
- Remove exotic noxious weeds and replace with local native plants in clusters, with a variety of local native grasses, shrubs and trees to provide protective habitat;
- Keep cats and dogs indoors from dawn to dusk (bandicoots are highly vulnerable to predation); and
- Avoid insecticides by promoting a natural ecosystem; natural predation will keep the local environment in balance.

More information:

<https://www.environment.nsw.gov.au/threatenedspeciesapp/profile.aspx?id=20107>



Appendix 2 – Grey-headed Flying Fox factsheet

Grey-headed Flying Fox

Scientific Name:
Pteropus poliocephalus

Conservation Status in NSW:
Vulnerable

Conservation Status in Australia:
Vulnerable

Photo: Vivien Jones



Description

The Grey-headed Flying Fox is a fairly large arboreal mammal with a wingspan of up to one metre and a head and body length of 230mm-288mm. They have a reddish-yellow mantle encircling the neck and a grey or whitish grey head. Fluffy, dark brown fur extends to the ankle - unlike other flying foxes whose fur only reaches the knee.

Habitat and ecology

The Grey-headed Flying Fox's social structure is organised around roost sites, known as camps, consisting of hundreds of individuals. They will utilise most habitat types which provide food, particularly eucalyptus woodlands and forests, typically near water. They feed on a variety of flowering and fruiting plants and are responsible for seed dispersal of many rainforest trees, such as native figs and palms. They also feed extensively on the blossoms of eucalypts, angophoras, tea-trees and banksias and are an important pollinator of those species.

Threats

Loss of habitat is the primary reason for the decline of Grey-headed Flying Foxes. The continuing loss of natural food resources means that they must search elsewhere for food, including fruit crops, which then become a problem for cultivated fruit growers. They are greatly depleted in numbers and the prediction is that they will continue to decrease by at least 20 per cent in the next three generations given the continuation of the current rate of habitat loss. Other factors that impact on the species are shooting and electrocution from farmers, and disturbance and destruction of roosting sites from habitat modification.

Finding a Grey-headed Flying Fox

If a Grey-headed Flying Fox is found while undertaking construction, you should contact any of the following organisations immediately:

WIRES	1300 094 737
Sydney Metropolitan Wildlife Services (‘Sydney Wildlife’)	9413 4300
Livingstone Road Animal Health Centre, Petersham	9568 3077
Coordinator Urban Ecology Volunteers and Projects Inner West Council	9392 5000

Protecting Grey-headed Flying Foxes

- Establish an area in the garden as a native fauna sanctuary, to provide shelter and food;
- Protect roost sites, particularly avoiding disturbance September through November; and
- Avoid insecticides by promoting a natural ecosystem; natural predation will keep the local environment in balance.

More information:

<https://www.environment.nsw.gov.au/threatenedSpeciesApp/profile.aspx?id=10697>



Appendix 3 – DCP 2011 Biodiversity Map

See the attached map.